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ABSTRACT

The goals of the Oswego County (New York) Board of Cooperative Educational Services (BOCES) Youth Employment and Training Program (YETP) was to improve job-readiness posture and self-concept of unemployed youth and in-school youth. Two types of classroom training supported the major learning activity, which was work experience. These activities consisted of modules developed in the three areas of job-readiness, pre-vocational skills, and work experience. The purpose of module I was to develop positive work attitudes and knowledge: module II trained participants in two of thirteen vocational areas. Work experience (module III) was available in the health, office, recreation and child care, maintenance, and other occupational areas. The Vocational Opinion Index was used to pre- and post-test attitudinal factors of job readiness. Results showed significant improvement, especially in the areas of attractions to work and ability to deal with new situations and people. Results of pre- and post-testing using the program-developed Self Appraisal Survey to assess self-concept showed significant improvement for those with a deficient self-concept. Participants were also evaluated subjectively at various times by BOCES Youth Employment Coordinators, teachers, Work-Site supervisors, and assessment team members. (A ten percent program was also implemented and evaluated.) (YLB)

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Oswego County Board of Cooperative Educational Services

Youth Employment Training Program 1978

Final Report

Allen Belkin and Cindy Dries

Oswego County BOCES, NY

CE 023 054

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Oswego County Board of Cooperative Educational Services

Youth Employment Training Program 1978: Final Report

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Oswego County BOCES

Introduction

1.1 The Problem of Youth Unemployment.

There has been much concern in recent years with the problem of youth unemployment. The situation is documented by current labor market statistics; nearly one in five teenagers are unemployed in the United States, with that figure jumping to almost one in four for non-metropolitan areas. Another large group of teenagers are not classified as unemployed because they have given up looking for work, or because they have taken part-time jobs for economic reasons. When these groups are added to those classified as unemployed, the total number of youths affected by employment problems in the United States is over 2.5 million.

1.1.1 Causes. The most obvious cause of unemployment in general is a lack of jobs. The overall unemployment rate follows the productivity of the economy. However, while the average yearly employment rate for adults has been as low as 2.7% in the past 25 years, the youth unemployment rate has been consistently over 11%. During this time period teenagers have been from two to five times more likely to be out of work than adults.[1]

Since unemployment rates for youth are so much higher than those for adults, there must be reasons other than the shortage of jobs that explain

the high rate of youth unemployment. A young person seeking work faces a number of special problems that do not affect adults as seriously. Any attempt to alleviate youth unemployment should involve solutions to these problems. Economically-oriented solutions involving the creation of jobs will not help many of the people who face other barriers to employment.

Probably the greatest of these barriers is the reluctance of employers to hire young people, for a variety of reasons which may or may not be valid. In a loose labor market, there are usually older workers available for job openings who would be preferred to younger applicants. In many cases, wage regulations eliminate the possible incentive of paying less to young people. Successful previous work experience and the availability of references from past employers are other factors which attract employers to older workers. Employers tend to think of teenagers as unreliable and unconscienscious workers.

Lack of education and vocational skills limits the career potential of young people. A whole realm of the labor market is cut off to those without a college degree, while the high school drop-out will have serious difficulties obtaining any job. On the other hand, the small number of people who graduate from certified occupational programs will have an advantage in the labor market over the graduates of academic programs who may have no marketable skills.

The transition from school to work is often a difficult time for young people and a time of much personal adjustment. Many youths are not really sure what they want to do and this may be reflected in low motivation to find work and poor attitudes on the job. Young people tend to change

jobs frequently and hence are considered poor risks by employers, especially when training is involved. The low-paying, unchallenging jobs that unskilled and inexperienced young people often get can create a sense of alienation and degrade one's self-esteem. This further decreases motivation and interferes with performance on a job.

In the absence of effective Career Education in the public schools, a young person will often encounter difficulties due to his lack of job-seeking skills. Many youths do not know where to look for jobs, cannot understand newspaper advertisements and may not even know of major employers in their communities. They may have difficulties filling out an application or handling an interview. If they have résumés at all, there is often little in their content that will impress an employer.

In some cases, other barriers may arise. Family responsibilities could interfere with the ability to work. In rural areas where public transportation is limited, a person without a car could find it impossible to get to work even if they could find a job. A lack of mobility would certainly hinder the job search.

1.1.2 Consequences. Prolonged unemployment may have long-range consequences on the personal development of young people that are far more significant than the income they lose. It is true that a part-time income may be necessary for some youths to continue in school and those who are forced to drop out of school will face further complications in their job searches. More importantly, however, entering the work force marks the beginning of a young person's independence and a chance to participate in

social and economic systems that he previously had only observed. The frustration of being unable to find a job could result in a loss of enthusiasm and self-confidence. Disillusionment with the economic system may also occur, leading some youths to antisocial activities and crime, and leading others to become accustomed to a lifestyle of idleness.

The development of career awareness is hampered when a young person is denied the opportunity to sample different jobs and to create the bases for career ladders. The failure to establish suitable work experience and references will create a disadvantage in future job searches.

1.1.3 Remedies. The youth unemployment situation described here boils down to two basic sets of problems that require attention. The first set of the problems, the lack of education, skills, experience and job-seeking knowledge, calls for instruction and practical training in these areas. The second set of problems, the demoralizing effects of unemployment, calls for providing constructive ways of occupying time, including supervised work experience accompanied by training oriented toward attitude development, decision-making skills and value-clarification. Work experience can correct unrealistic perceptions of the world of work, provide a sense of accomplishment and pride in one's work, and develop appropriate work habits.

An opportunity to test those approaches has been provided by the federally-funded Youth Employment Training Program.

1.2 Youth Employment Training Program.

1.2.1 Purpose. The Youth Employment Training Program (YETP) is one of four programs authorized by Title II of the Youth Employment and Demonstrations Projects Act of 1977 (YEDPA) in order "to explore methods of dealing with the structural unemployment problems of the nation's youth" and "to test the relative efficacy of different ways of dealing with these problems in different local contexts." (YEDPA, p. 632)

YETP is more specifically given the purpose of enhancing "job prospects and career opportunities of young persons" (YEDPA, p. 639) with training and employment opportunities that are interrelated and mutually reinforcing. Also stressed is the coordination and improvement of existing youth services, the promotion of institutional cooperation among Comprehensive Employment and Training Act (CETA) prime sponsors, local educational agencies and community-based organizations, and the development of knowledge about new approaches to the problem.

1.2.2 Planning. The Federal regulations deliberately left the details of local implementations of YETP to be planned by local applicants, in order to best serve local needs. In Oswego County, this initial planning was undertaken by local educational agencies, including chief school officers from the local school districts and the Oswego County Board of Cooperative Educational Services (BOCES) and by the Oswego County Office of Employment and Training (OET), which is the local CETA prime sponsor. An analysis of needs was prepared, taking into consideration population data, the labor market, current youth services and local priorities. Based on this information, decisions were made regarding general goals, people to be served

and program activities. The application for the funding was approved for two projects, one operated by Oswego High School and the other operated by Oswego County BOCES. Only the latter is reported here.

1.2.3 Goals and activities. A statement of program goals, prepared by the BOCES Task Force Advisory Council is included as Appendix A. These are oriented towards knowledge, attitudes and affective learning. Performance goals were developed by OET, based on experience with other youth programs. These included a projected 11 percent placement rate. Other projections were made for rates of return to school, continuance in school and transfer to other CETA programs.

A detailed description of the activities that comprised the BOCES implementation of YETP and of the participants can be found in the section 2.2 of this report. The major learning activity is Work Experience. This was supported by two types of classroom training which served to facilitate the transition from unemployment or high school to work. This training involved vocational skills and job readiness skills.

Transportation was provided by BOCES, which eliminated a major employment problem for participants in a county which is largely rural and lacks public transportation in many areas.

1.2.4 Knowledge development. A major intent of YEDPA is to test new approaches to the problem of youth unemployment and to learn how various approaches work in various situations. In the interest of wise decision-making and allocation of resources, it is essential that the impact of these programs be evaluated. Such evaluation can demonstrate the overall worth of a program as well as point out strong and weak points, leading to

suggestions for improvements in future programs. In order to carry out this evaluation, the authors of this report were assigned as an Assessment Team.

Traditionally, the evaluation of an employment program focused on economic factors such as increase in income and employment stability and decrease in public assistance enrollment. The situation of youths, however, makes these items not entirely applicable, while bringing other factors into prominence. When dealing with young people, it is not realistic to think in terms of chronic unemployment problems. Hence, training should be viewed as preventive rather than remedial. Targeting can be reasonably based on socio-economic disadvantage, drop-out potential or financial need, but no one can say for sure which youths will "make it" on their own and which will need assistance. The effects of maturation alone can be powerful and unpredictable.

The economic situation of youths are often dependent on that of their families; evaluation of the basis of economic factors can thus be misleading. Furthermore, such evaluation is not suitable for immediate follow-up, but rather, requires waiting several months to several years for meaningful data. In a previous section, we discussed the increased importance of non-economic factors in the youth situation. In our assessment of YETP, we chose to focus on mostly non-economic factors. As we will demonstrate, we believe these factors are good predictors of future employment stability and therefore are good indicators of the accomplishment of major program goals.

1.2.5 Ten-percent program. One area of knowledge development specifically mandated by YEDPA (section 345a.) involves testing the desirability of mixing youths of all economic backgrounds in programs as opposed to targeting programs for the economically disadvantaged. The arguments for each option

are outlined in a Department of Labor report ("Program Design Options....").

The arguments in favor of including non-economically disadvantaged youths are:

- The income requirements for eligibility is an arbitrary cut-off and youths above this level may be as much in need of training as those below.
- Negative attitudes toward work, school and society, and concomitant problems of social adjustment are inversely related to family income.
- If such attitudes are held by significant members of a training group, it could generate an overall negative atmosphere in the programs.
- Negative peer group pressures could influence the attitudes of more positive members of the group.
- Since participants of higher social-economic status are likely to have better attitudes toward work, school and society they might serve as positive role models, thus generating an atmosphere that is conducive to program goals.
- A program exclusively for the poor could cause negative publicity based on prejudices against the poor. This could interfere with arranging the best work experience placements if employers are unwilling to accept participants. It could also stigmatize the program, thus hindering recruitment efforts.

Arguments against the mixing of economic levels include:

- Financial resources are scarce and should be targeted to those in greatest need of training.
- If non-disadvantaged youth are in need of the kind of training provided by YETP, then their attitude will probably not be such as to positively influence other participants.
- Even if such positive influence does occur, contact of two hours a day will not outweigh other negative influences that may come from family or other peer groups with whom much larger amounts of time are spent.
- Unless those with positive attitudes represent a significant portion of the peer group (either in numbers or in influence), then they are not likely to have much effect on the rest of the participants. To make this program work would therefore require spending a significant amount of the money on people who by definition, don't really need this kind of training.

YEDPA authorized the use of up to 10 percent of YETP funds for non-economically disadvantaged youths in order to test these hypotheses. The procedures and results of this research are described in following sections.

1.3 Theoretical Models.

In order to measure affective growth among YETP participants, we relied on a number of theoretical models which provided constructs to be measured, techniques for measurement and evidence that the measurements are both reliable

and meaningful. Most prominent among these was the transition to work (TTW) model of Benson and Whittington (1973).

1.3.1 Transition to work. TTW originated with the observation that vocational skills and placement opportunities are not sufficient to insure stable employment, but that attitudes and motivation have an important role. Investigation of attitudinal variables led to the basic construct of TTW, Job Readiness Posture (JRP). This is defined as "the set of psychological constructs (attitudes and perceptions) which permits an individual to accept and work within the social contraints established by a work enviroment" (Benson and Whittington, 1973, p.5). Factor analysis of a large number of attitudinal variables indicates two basic requirements for JRP:

1. Perception of net personal gain resulting from working. This encompasses the benefits of working (Attractions) minus the sacrifices (Losses).

2. Lack of real or perceived Barriers to getting and keeping a job.

Transition to work thus involves vocational and job-seeking skills as well as the development of an appropriate JRP.

The Vocational Opinion Index (VOI), an instrument for measuring JRP, is described later in this report. It is notable that the VOI has been used to predict employment status with 93 percent accuracy.

1.3.2 A social-psychological model. A second model which influenced our research is the social-psychological approach discussed by Tiffany, Cowan and Tiffany (1970). It is based on the assumption that employment situations place psychological and interpersonal demands on individuals and that working

involves the fulfillment of personal and social needs. Two general types of obstacles to employment are identified; enviromental obstacles, such as lack of training or education, physical disabilities or prejucice against minorities, and personal obstacles, including various attitude or adjustment problems which interfere with getting a job or which create problems on the job.

The psychological construct which emerges from this model is called self-direction. This involves a complex of experiences relating to one's control over and being controlled by internal and external forces. On a more practical level, it refers to one's ability to set and accomplish goals, and encompasses such notions as self-concept, locus of control, alienation, powerlessness and helplessness.

In our research we choose to focus on a simpler construct, the self-concept. Since working is a major part of one's life and one's identity, a weak self-concept will make it difficult for one to feel settled in any occupation. Negative self-concept indicates a lack of confidence in one's ability to achieve goals and decreases motivation. Since one's perception of oneself is reflected by one's perception of others, a negative self-concept can lead to difficulties in getting along with people. This is certainly a disadvantage in any work situation.

The connection between self-concept and employability has been directly demonstrated by experimental work (Tiffany, Cowan, and Tiffany, 1970). The Tennesee Self-Concept Scale was used to compare work-inhibited clients with former clients who had been steadily employed for a year. The employed group scored higher on all nine factors of the scale and the differences

were significant in seven of the nine factors.

While a negative self-concept can create employment difficulties for an individual, a properly designed program of training and work experience can provide a sense of accomplishment which can crystallize into a more positive self-concept. Counselling can assist this process by helping the person to focus on accomplishments, to develop goals and to realistically appraise personal strengths and weaknesses.

1.3.3 Hypotheses. The theoretical models described above lead to abstractions of human experience that may be defined as psychological constructs. These constructs may be further operationally defined in terms of techniques of measurement. The hypotheses with which we will work are thus two times removed from the human experience that is our actual concern. With this in mind, we will keep our hypotheses as general as possible. Among participants in YETP, we hypothesize an improvement in both Job-Readiness Posture and Self-concept. These are described in the preceding section as abstract constructs and will be operationalized in terms of measurement tools in the following section. In addition, we will examine placement rates and various sources of subjective information. Any operationalization of this data would be totally arbitrary; the data itself is nonetheless enlightening in terms of the experiences of the participants.

Method

2.1 Participants.

2.1.1 Eligibility and targeting. A total of 174 participants were enrolled in YETP between February and September of 1978. In-school

participants were referred by their guidance counselors. The program was advertised throughout the county to recruit out-of-school participants. All participants were screened by the Office of Employment and Training (OET), to determine eligibility. To be eligible, participants had to be:

- between 16 and 21 years of age
- unemployed
- economically disadvantaged, defined by an income not exceeding 85% of the lower living standard income level as determined by the Bureau of Labor Statistics. An exception is allowed by YEDPA to use up to 10% of the funding for non-disadvantaged youth in order to test whether the disadvantaged benefit from programs mixing youths of different economic backgrounds. Ten non-disadvantaged youths were enrolled during the course of the program.
- living in one of the ten school districts of Oswego County. The Oswego City School District ran a separate program for in-school youth, which is not reported here.
- not participating in regular occupational educational programs at BOCES or at home schools

Recruitment continued from February until June on a continuous basis in order to refill slots vacated by people terminating from the program. A maximum of 135 participants could be enrolled at any one time, and these were originally apportioned to the school districts according to population. Additionally, there were 78 slots reserved for in-school participants and 57 for out-of-school participants.

By the combined efforts of home-school guidance counselors, OET counselors and BOCES Youth Employment Coordinators, eligible participants were screened to determine appropriateness of YETP to their needs. The following target groups, based on local priorities, were designated for this screening (Oswego County's FY '78 YETP Grant Application, 1977, p.73) :

Target Group	Reason for Selection
In-School Youth	**To insure future employability**
a. Potential drop-outs	a. To help participant better understand relationship between school and work
b. Ineligible for voc. ed. programs	b. To provide minimal skills through process at vocational exploration and to provide opportunity for later occupational education
c. Need financial assistance to complete school	c. To provide income to permit student to remain in school
Out-of-School Youth	**To employ**
a. Possible returnees to school	a. To reestablish linkages with school, to test "academic credit for work experience" concept
b. Seeker of equivalency diploma	b. To provide opportunities for remedial academic instruction
c. Need to establish competency-based credential	c. To develop competencies through work experience that can serve as diploma-like lever

2.1.2 Demographic data. The following data describes the participants. Note that a number of the participants were enrolled for a very short time, either because they found other jobs or failed to continue attending the sessions. Also, due to logistical difficulties in administering tests,

considerably less than the 170 participants who were enrolled at some time in YETP were tested. The groups tested are described in later sections. The characteristics of the complete group are described in Table 2-1.

Table 2-1 Demographic make-up of participants

Sex:	Age (mean age = 17.5)
Male - 85	16 - [illegible]
Female - 85	17 - 47
Ethnic background:	18 - 18
White - 167	19 - 15
Black - 1	20 - 9
Hispanic - 2	21 - 12
	Unknown - 21

Note that according to New York State Department of Labor figures, 1 percent of Oswego County's projected economically disadvantaged population for 1978 is non-white.

We have some additional information on those participants enrolled on March 31, 1978. Of 128 participants, 122, or 96.9 percent were unmarried. Of 97 participants for whom information was available, 5, or 5.2 percent were heads of households, 8, or 8.2 percent were financially independent and 84, or 86.6 percent were dependents and members of families. Of 52 out-of-school participants, 13, or 25 percent were high school graduates, while the rest did not have diplomas.

2.2 Learning Activities.

The activities of YETP consisted of three modules:

Module I	Job-Readiness Skills	60 hours
Module II	Pre-Vocational Skills	80 hours
Module III	Work Experience	300 - 550 hours

2.2.1 Job-Readiness skills. The curriculum for Module I was designed and taught at BOCES by the Youth Employment Coordinators based on program goals specified by the BOCES Task Force/Advisory Council (Appendix A). The classes met two hours a day, five days a week for four weeks and then continued one day a week for ten weeks after that. The purpose of Module I was to develop attitudes and knowledge to help the participants become marketable employees. Learning activities included classroom lectures, large and small-group discussions, films, field trips, guest speakers, and role playing. Some of the areas covered included:

Values clarification and attitude development

Why work

Perception of self, interest, values, abilities and goals

Decision-making

Developing responsibility

Setting goals

What to look for in a job

Job-Seeking

The importance of planning

How jobs become available

Where to look for work

Employment service

Newspapers

Mistakes of job-hunters

Resumes

Cover letters

Applications

Interviews

Follow-up letters

On the job

Attitudes and behavior

The paycheck

Budgetting

2.2.2 Pre-Vocational skills. The purpose of Module II was to introduce participants to vocational skill areas. Each participant received 40 hours of training in each of two vocational areas. Most of the teachers were regular BOCES daytime teachers who were experienced in their particular areas as well as in teaching occupational education. The facilities and equipment at BOCES were used. The following areas were offered:

Art & Related Photography

Auto Mechanics

Carpentry

Child Care

Cosmetology

Data Processing

Food Preparation

Health Occupations

Heavy Equipment

Retailing

Secretarial Skills

Small Engine Repair

Welding

The classes involved classroom and lab instruction, audio-visual aides, guest speakers, and hands-on experience. While the classes were not of sufficient length to be considered to provide entry-level training for all participants, it was hoped that a number of participants would be able to use the training to obtain entry-level jobs. This might apply to participants who had some prior background in an area. For most participants, Module II served as a general introduction and a stepping stone to more advanced training, possibly at BOCES daytime classes or through other CETA-funded programs. However, in response to feedback from participants, skills teachers and work-experience supervisors, a more in-depth training program will be instituted in YETP for fiscal year 1979, consisting of 100 hours of training in each of two areas plus 4 hours of orientation in each of 12 areas.

2.2.3 Work-Experience. An important component of YETP was on-site work experience. Out-of-school participants worked 10-20 hours a week during the day while Modules I and II were occurring as well as 30 hours a week during the summer. In-school participants worked only during the

summer. In-school participants worked only during the summer, putting in about 30 hours a week. The Federal regulations stressed the creation of "meaningful" jobs rather than "make-work activities" (Youth Programs, p.46734). The purpose of Module III is to allow the participant to experience the world of work, and develop a personal appreciation of work and its rewards and problems. Where possible, such jobs could serve as the first rungs of career ladders. Close contact was maintained among participants, BOCES Youth Employment Coordinators and Work-site Supervisors.

All jobs were in the public sector, either at municipal facilities or at non-profit organizations. Participants were placed in the following areas:

Health

a. Dietary Assistant

b. Medical Records Assistant

c. X-ray Assistant

d. Lab Assistant

e. Purchasing Clerk

Office

a. Clerical Aide

b. Filing Assistant

c. Typist

d. Clerk

e. Secretarial Aide

Recreation and Child Care

a. Recreation Aide

b. Day care Assistant

Maintenance

a. Maintenance Aides

b. Custodians

c. Laborer

d. Landscaper

e. Conservationist

f. Mechanics

Other Areas

a. Inventory Clerk

b. Publicity Assistant

c. Bicycle Registration

d. Printer's Assistant

2.3 Assessment Materials.

The assessment of YETP began with an examination of the Mission Statement (Appendix A) to identify objectives which were amenable to measurement by paper-and-pencil tests. We then searched for existing tests that might measure some of these areas.

2.3.1 Job-Readiness Posture:The Vocational Opinion Index. To measure attitudinal factors of job-readiness, we chose the Vocational Opinion Index (VOI). This was developed by Associates for Research in Behavior, Inc. "to investigate the subjective factors that influence a trained person's

transition from student to worker status" (Benson and Whittington, 1973, p. 2). The results of these investigations produced the theoretical model of Transition to Work (TTW) and the psychological construct of Job-Readiness Posture (JRP) described in section 1.3.1. The VOI provides scores on thirteen "areas of concern", "potential misconceptions or problems a (participant) may face in attempting transition to work" (Whittington, 1977). These are grouped under three general factors:

Attractions:

- A1. Overall
- A2. Benefits to children
- A3. Benefits to worker
- A4. Better lifestyle
- A5. Independence

Losses:

- L1. Overall
- L2. Personal freedom
- L3. Time to care for and be with family

Barriers:

- B1. Medical
- B2. Child care and family
- B3. New situations and people
- B4. Ability to get and hold a job
- B5. Transportation

The test consists of 37 items. Raw scores are evaluated in terms of a "normative range" for each area of concern, which was empirically determined on the basis of the responses of MDTA trainees who successfully entered the work force. It is assumed that the measured attitudes of trainees who have made a successful transition to work is a good standard by which to predict the appropriateness of the attitudes of current trainees. Thus,

scores within this normative range are called "OK". Scores either above or below this range in the Attractions and Losses areas of concern indicate a potential difficulty in transition to work, and are called "+" or "-" respectively. A "+" score means that the person expects too much gain (i.e., Attraction), or too much Loss, compared to the norm group of working ex-trainees, while a "-" score means that the person expects too little gain or too little loss. A major asset of the VOI is its recognition that what might appear as an extremely positive work-attitude could actually indicate unrealistically high expectations that can cause problems if they are violated when the person enters the work force.

The reliability of the VOI, measured in terms of coefficient alpha, ranged from .75 to .86. The predictive validity of the test is particularly impressive. A separate questionnaire was used to place completers of training programs into one of the following four Work Status categories:

1. Worker - someone currently working
2. Questionnable - insufficient or conflicting data
3. Non-worker with predisposing problems, such as medical, child care, transportation, etc.
4. Non-worker with non-predisposing problems such as attitudinal or motivational problems.

Multiple discriminant analysis was used to predict Work Status from VOI responses, resulting in correct predictions 93% of the time.

2.3.2 Self-concept: The Self Appraisal Survey: Although we found many self-concept tests, none of them were entirely satisfactory to us in their original forms. We began collecting test items relating to self-concept in order to construct our own instrument. The test we put together.

is based mainly on the Self-Appraisal Inventory, (Instructional Objectives Exchange, 1972). We eliminated several items, simplified the wording of others and added new items drawn from other tests.

The original version, used as a pre-test, consisted of 66 statements relating to self-concept, followed by the choice of responses:

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

Responses are weighted from one to five, such that a response indicating more favorable self-concept receives a higher score. The pre-tests were then analyzed by the Likert technique (Edwards, 1957, ch.6). The direction of scoring for some items was changed and all items which did not discriminate the high from the low scorers at the .01 level were rejected. The 66 original items were reduced to a final version of 45 items and the pre-tests were scored on the basis of these 45 items only. The coefficient of homogeneity (coefficient alpha) for these items is .93, indicating an extremely reliable test. The standard error of measurement is 5.88. We called this test the Self-Appraisal Survey, abbreviated as SAS.

2.3.3 Other evaluation. Participants were evaluated subjectively at various times during the program. These evaluation forms and tallies of responses may be found in a later section. They included Progress Reports filled out by BOCES Youth Employment Cordinators at the end of the fourth week of Module I, Pre-Vocational Skills Class evaluations filled out by Pre-vocational Skills Class Teachers and Work-Experience Evaluations filled out by Work-Site Supervisors. In addition, each participant was interviewed

by a member of the Assessment Team during Module III. Participants were also contacted six months after the program ended for a follow-up interview.

Placement goals were established based on experience with previous youth programs. These included:

- 11% of the participants entering unsubsidized employment.
- 58% of the participants classified as "Other positive terminations". This includes transfer to other CETA programs, returning or continuing in school, or entering Military Service.
- 31% of the participants classified as "Non-positive terminations".

The following are considered "Other positive" reasons for termination:

- returning to or continuing in school
- transferring to other CETA - funded or other subsidized programs
- entering the armed forces
- achieving individual objectives such as earning an equivalency diploma

"Non-positive" terminations include all other reasons, primarily refusal to continue, administration separation, moving away from the area and health or family problems.

In order to help participants identify career goals and to provide a counselling tool to the Youth Employment Coordinators, the Career Assessment Inventory was filled out by each participant when they entered the program. This instrument uses norm groups of people successfully employed in a variety of occupations and compares their personal preferences with those of people taking the test. It measures how suitable a particular career is

to a person's temperment.

2.3.4 Administration of tests. Ideally, pre-tests were to be administered to participants within a few days of their entrance to the program. With the exception of absentees, this was accomplished in Module I classes during the first week of the program for the group that started that week. Because vacancies were filled as they occurred, new participants were enterring the program continously and had to be tested on an individual basis. This became complicated by the problem of removing individuals from on-going classes, and some individuals were never tested. However, in order to assess the impact of the complete mix of activities, we were primarily interested in those participants who attended at least parts of all three modules.

A total of 107 SAS pre-tests and 116 VOI pre-tests were administered. Tests were missing from participants who were in the program a very short time, or who started late in the program such that the tests would not acurately reflect the impact of the program, or who were overlooked for a variety of reasons. These reasons would tend to exclude participants randomly, with the exception that participants who were frequently absent were more likely to have been overlooked.

Post-tests were administered individually by Youth Employment Coordinators at Work Experience sites during the month of August. Participants who left the program before August were not post-tested. Also, some participants could not be contacted, particularly those who left the program without notice and for non-positive reasons.

The results reported here, therefore only represent those participants who were involved in all three Modules and who left the program for positive reasons, as defined in section 2.3.3. The total numbers of matched pre- and post-tests were 51 for the SAS and 39 for the VOI. While not a particularly large sample, we feel it is sufficient to observe changes and make general conclusions.

2.3.5 Ten percent program design. As authorized by YEDPA, an attempt was made to evaluate the desirability of including youth of all economic backgrounds. It was necessary to identify the extent of contact of each disadvantaged participant with non-disadvantaged participants and to assess the relationship of this contact with test performance. It was possible to control this contact only during Module II by identifying skills classes with and without non-disadvantaged participants. The experimental group consisted of those disadvantaged participants enrolled in at least one skills class that included at least one non-disadvantaged participant. The control group consisted of those disadvantaged participants who had no contact with non-disadvantaged participants in either of their skills classes. By minor adjustments of the schedules of non-disadvantaged participants, it was possible to obtain adequate sample sizes in both groups and to balance somewhat the range of occupational interests represented in the two groups. The following classes contained non-disadvantaged participants:

Art and Related Photography

Carpentry

Child Care - Section A

Data Processing

Retailing

Secretarial skills

Thus, any participant in any of these classes was assigned to the experimental group, while participants in none of these classes were assigned to the control group. These groups were further restricted to those participants who took both pre- and post-tests of each test. For the VOI, there were 25 in the experimental group and 12 in the control group. For the SAS, there were 30 in the experimental group and 19 in the control group.

Neither the participants nor the skills class teachers were informed that non-disadvantaged participants were in the program or that this research was taking place.

RESULTS

The following sections contain detailed technical descriptions of the assessment results, the statistical procedures used to interpret them, and the rationale for the use of these procedures. The reader who is interested in a general summary and interpretation of these results can skip to section 4.

3.1 Job-Readiness Posture.

3.1.1 Areas of concern. The scores on the VOI for the participants who took both pre- and post-tests are shown in Table 3-1. Some inferences can be made about our sample concerning the general nature of their strengths and weaknesses. For the example, the biggest problem is the Attractions

areas with 59.0% failing to score in the "OK" range on the pre-test. The Losses areas, on the other hand showed less than half as many people, or 27.4%, with scores in the "+" or "-" range indicating it to be much less of a problem with our participants.

Within the Barriers, New Situations and People was the greatest initial problem, with 69.2% of the participants perceiving it as a barrier to employment. Ability to get and hold a job and Transportation were the smallest problems, affecting 38.5% and 41.0% of the participants, respectively.

Among the Attractions and Losses, the "non-OK" scores were mostly "-", rather than "+", indicating a tendency to underestimate both Attractions and Losses. The "-" scores accounted for 93% of the "non-OK" Attractions scores and 71.9% of the "non-OK" Losses scores. Recall, however that "non-OK" Losses scores were only 27.4% of the total Losses scores.

The general picture we get from the pre-test scores is that the greatest employability problem among our participants was the lack of awareness of the benefits of working. Most participants perceived accurately what they would sacrifice by working and many also were confident of their ability to get and hold a job, but most were insecure about dealing with new situations and people.

In order to assess the impact of YETP on participants, it is necessary to compare pre- and post-test scores. Looking at the tallies in Table 3-1, the number of people scoring "OK" increased from the pre- to the post-test in seven areas, decreased in four areas and stayed the same

in two areas. Applying a chi-square test to these tables, only one area approaches significance. This is Benefits to Children, and is marginally significant ($p = .07$). However, the chi-square test is very sensitive to the size of the sample and a sample of only 39 requires fairly large differences to be significant. By pooling the sub-areas within the Attractions, Losses and Barriers, respectively, we can increase the working sample size as well as examine more general changes of these three areas. These tallies are included in the table. The total pooled Attractions scores changed very significantly ($p = .01$) in a positive direction, but the Losses and Barriers changes were not significant although their direction was positive. All three areas were also pooled together, by "OK" vs. "non-OK" scores. This change was marginally significant ($p = .07$).

Looking at the "non-OK" scores on the Attractions and Losses areas, the "+" scores increased in seven areas and were unchanged in one, while the "-" scores decreased in six areas and stayed the same in two. Thus, the general trend of change was for participants to perceive both greater attraction and greater loss in working. In a few cases, the "OK" range was "overshot", resulting in the increased number of "+" scores.

3.1.2 Raw scores. A more detailed analysis of trends of change requires an examination of raw scores. However, this is complicated in the VOI by the fact that Attractions and Losses scores are interpreted not in terms of absolute magnitude but rather in terms of whether they fall within a normative range. For example, scores in first area of concern, Overall Attractions, can range from 14 to 70, with a normative range of

Table 3-1. Tallies of VOI scores. Chi-square is reported only when significant differences are present.

Attractions:	OK		+		-	
	N	%	N	%	N	%
A 1 - Overall						
Pre	13	33.3	1	2.6	25	64.1
Post	19	48.7	2	5.1	18	46.2
A 2 - Benefits to children						
Pre	14	35.9	0	0.0	25	64.1
Post	21	53.8	2	5.1	16	41.0
	$\chi^2 = 5.38$		P = .07			
A 3 - Benefits to worker						
Pre	19	48.7	2	5.1	18	46.2
Post	22	56.4	3	7.7	14	35.9
A 4 - Better life style						
Pre	15	38.5	4	10.3	20	51.3
Post	21	53.8	6	15.4	12	30.8
A 5 - Independence						
Pre	19	48.7	1	2.6	19	48.7
Post	17	43.6	3	7.7	19	48.7
Total Attractions						
Pre	80	41.0	8	4.1	107	54.9
Post	100	51.3	16	8.2	79	40.5
	$\chi^2 = 9.10$		P = .01			

Table 3-1 (continued)

Losses:	OK		+		-	
	N	%	N	%	N	%
L 1 - Overall						
Pre	29	74.4	2	5.1	8	20.5
Post	29	74.4	5	12.8	5	12.8
L 2 - Personal Freedom						
Pre	27	69.2	5	12.8	7	17.9
Post	33	84.6	4	10.3	2	5.1
L 3 - Time to care for and be with family						
Pre	29	74.4	2	5.1	8	20.5
Post	25	64.1	6	15.4	8	20.5
Total Losses						
Pre	85	72.6	9	7.7	23	19.7
Post	87	74.4	15	12.8	15	12.8

Table 3-1 (continued)

Barriers:	OK		X	
	N	%	N	%
B 1 - Medical				
Pre	19	48.7	20	51.3
Post	19	48.7	20	51.3
B 2 - Child care and family				
Pre	22	56.4	17	43.6
Post	28	71.8	11	28.2
B 3 - New situations and people				
Pre	12	30.8	27	69.2
Post	18	46.2	21	53.8
B 4 - Ability to get and hold a job				
Pre	24	61.5	15	38.5
Post	22	56.4	17	43.6
B 5 - Transportation				
Pre	23	59.0	16	41.0
Post	20	51.3	19	48.7
Total Barriers				
Pre	100	51.3	95	48.7
Post	107	54.9	88	45.1
Total of all areas				
Pre	265	52.3	242	47.7
Post	294	58.0	213	42.0
	$\chi^2 = 3.13$		P = .07	

21 to 31. Any score between 21 and 31 indicates appropriate JRP, a score greater than 31 indicates expectations which are too high, and a score less than 21 indicates expectations which are too low. In evaluating change for an individual score, we look for movement toward the mid-point of the normative range, in this case, 26. Evaluating change for a group of scores is more complicated. First of all, we look for movement of the mean toward the mid-point of the normative range. However, we also need to know that high scores get lower and low scores get higher, towards the mid-point of the range. This information can be obtained through a statistical procedure called regression analysis.

Regression analysis uses the relationship between two sets of scores, in this case, pre- and post-tests, to develop a formula that provides the best prediction of a post-test score from any given pre-test score. The formula is of the form:

Predicted post-test score =

Mean of post-tests + K (pre-test score - mean of pre-tests)

where K is a constant. When both means are known, this reduces to the familiar formula for a straight line:

$$Y = mX + b.$$

The constant K is equal to m, the slope of the line. If the slope equals one, then the change from pre- to post-test is constant over the full range of scores, indicating no movement towards or away from the mid-range. If the slope is greater than one, then low scores tend to get lower and high scores tend to get higher. For the VOI, this would mean a worsening of

scores. If the slope is less than one, then low scores tend to get higher and high scores tend to get lower, indicating the improvement of VOI scores. Finally, if the slope equals zero, then there is no relationship between pre- and post-tests and the best prediction of any post-test score is the mean of post-tests.

When low scores get higher and higher scores get lower, there must be a "pivot" point at which the changeover takes place, where the pre- and predicted post-test scores are equal. For the VOI, it is desirable that this pivot point be as close as possible to the middle of the normative range. When this is the case, scores will tend to converge on this mid-point, rather than on a point above or below this point, or possibly outside the range altogether.

Raw score data for the Attractions and Losses areas are shown in Table 3-2. All slopes are well below 1.0 and well above zero. The Attractions pre-test means are all higher than the respective normative ranges. The Attractions post-test means move within the normative ranges for three of the five areas and move closer to the mid-point in all five areas. The changes are statistically significant in one area, Better Life Style ($p = .08$). The "pivot points" are all closer to the mid-point of the normative range than the post-test means are, implying that the scores are skewed toward the mid-range. The post-test means remain above the mid-range, indicating a tendency to underestimate attractions.

The Losses pre-test means are all within the respective normative ranges, but the post-test means move closer to mid-range in two of the three areas. One of these changes is statistically significant, Overall

Losses scores, we can obtain a unified measure of work attitude. This score, shown in Table 3-2, improved very significantly ($p = .02$).

The Barriers are easier to deal with, because they are interpreted in terms of presence or absence of the particular problem. A problem is considered to be present if the raw score is above a cut-off point. Improvement can therefore be measured in terms of significant increase in scores. In Table 3-3, we see that all four Barriers means increase from the pre-test to the post-test and that one, Child Care and Family, is marginally significant ($p = .07$). In addition, the pooled total Barriers shows an improvement which is marginally significant, ($p = .08$).

The fifth Barrier, Transportation, does not have a raw score at all. It is not based on "attitude" questions, but rather on the following "factual" questions:

1. What is most likely to cause you to be late or absent from the training program?
2. Why did you leave your last job?

If "transportation" is marked for either of these questions, a Transportation Barrier is considered to be present. Responses to the second question are not likely to change from pre- to post-test. The first question is not appropriate for our purposes because transportation was provided by YETP. The problems that YETP encountered with transportation caused some lateness and absence, but does not accurately reflect the problems an individual would have providing his own transportation. For these reasons, the Transportation Barrier will not be considered further.

Table 3-2 Comparison of pre- and post-tests: Vocational Opinion Index, Attractions and Losses.

N = 39

SD = Standard Deviation

(Better score is underlined)

Variable	Normative Range	Mid-point	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Regression Slope	Regression Pivot	t-test
Attractions									
A1. Overall	21-31	26.0	33.82	7.44	31.07	7.61	.41	29.1	1.60
A2. Benefits to children	4-7	5.5	8.23	2.42	7.43	2.08	.13	7.3	1.55
A3. Benefits to worker	9-14	11.5	14.46	4.15	13.38	3.69	.40	12.6	1.20
A4. Better life-style	7-11	9.0	11.30	3.17	10.02	3.35	.29	9.5	1.73*
A5. Independence	6-9	7.5	9.71	2.39	8.94	2.69	.46	8.2	1.33
Losses									
L1. Overall	22-33	27.5	29.12	4.71	26.97	6.13	.56	24.2	1.73*
L2. Personal Freedom	13-20	16.5	16.64	3.51	15.33	3.35	.32	14.7	1.66*
L3. Time for Family	9-14	11.5	12.48	2.59	11.64	3.43	.66	10.0	1.22
Attractions and Losses									
A1. + L1. Pooled overall	43-64	53.5	62.95	7.74	58.05	10.02	.67	48.0	2.42**

* $p < .10$

** $p < .02$

Table 3-3. Comparison of pre- and post-tests: Vocational Opinion Index, Barriers. (Better score is underlined)

Variable	Cut-off	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	t
B1. Medical	3	3.33	1.72	<u>3.79</u>	1.52	1.25
B2. Child Care & Family	22	24.10	6.89	<u>27.07</u>	7.33	1.84*
B3. New Situation & People	12	9.84	3.17	<u>10.82</u>	2.93	1.40
B4. Ability to get & hold a job	7	<u>6.92</u>	1.59	6.82	1.50	.29
<u>Total Barriers</u>	44	44.20	10.80	48.51	11.00	1.75*

* $p < .10$

3.1.3 Subgroups: Analysis of covariance. In order to compare the performance of two or more groups of participants on the VOI, we used an extension of regression analysis called analysis of covariance (ANCOVA). By this procedure, we find a single slope that best describes the change in scores pooled within each of the groups. This slope is then used with the pre- and post-test means to form a regression formula for each group. When these formulas are solved using the mean of all the pre-tests, the result is a predicted or "estimated" post-test mean which is adjusted for differences in the pre-tests between the groups.

Because this procedure is available, we need not worry about whether the groups are evenly matched or randomly distributed. If one group should score much higher than the other on the pre-tests, we could not fairly compare post-tests, but we could still compare the "adjusted post-test means" to assess which group showed greater change.

In the interpretation of this data, we follow the same general principles described previously for the analysis of raw scores. In this case, however we look for three things:

1. Does one of the adjusted post-test means move closer to the mid-point of the normative range than the other, and is the difference significant?

2. Is the slope of one line significantly lower than the other (without approaching zero)?

3. Is the "pivot" of one group closer to the mid-point than the other?

Tables 3-4 and 3-5 presents this information comparing out-of-school and

Table 3-4 Vocational Opinion Index, Attractions and Losses, Comparison of Out-of-school and In-school participants (Better score is underlined)

Variable	Mid-point of Normative range	Out-of-school - (N=10) Pre-test mean	Post-test mean	Adjusted post-test	Slope	Pivot	In-school - (N=29) Pre-test mean	Post-test mean	Adjusted post-test	Slope	Pivot	Equality of slopes	Equality adjusted means
Attractions													
A1. Overall	26.0	35.50	29.90	<u>29.18</u>	.24	<u>28.1</u>	33.24	31.48	31.73	.48	29.9	.35	.95
A2. Benefits to children	5.5	9.00	7.30	<u>7.19</u>	.15	<u>7.1</u>	7.96	7.48	7.52	.14	7.4	.00	.17
A3. Benefits to workers	11.5	15.40	13.10	<u>12.71</u>	-.04	13.2	14.13	13.48	13.62	.62	<u>12.4</u>	6.16**	.52
A4. Better life-style	9.0	11.80	10.10	<u>9.46</u>	.04	10.0	11.13	10.00	10.05	.35	<u>9.4</u>	.48	.01
A5. Independence	7.5	10.00	8.50	<u>8.37</u>	.93	-11.9	9.62	9.10	9.15	.35	<u>8.8</u>	1.92	.72
Losses													
L1. Overall	27.5	29.20	23.40	23.36	.35	20.3	29.10	28.20	<u>28.22</u>	.63	<u>26.7</u>	.41	6.39**
L2. Personal Freedom	16.5	16.80	13.70	13.65	.17	13.0	16.58	15.89	<u>15.91</u>	.39	<u>15.4</u>	.51	4.05*
L3. Time for Family	11.5	12.40	9.70	9.75	.33	8.4	12.51	12.31	<u>12.29</u>	.71	<u>11.8</u>	.60	5.90**
Attractions & Losses													
A1. & A2. Pooled overall	53.5	64.70	53.30	<u>52.01</u>	.73	22.9	62.34	59.68	60.13	.74	<u>52.3</u>	.00	7.51***

* P<.10
** P<.05
*** P<.01

Table 3-5 Vocational Opinion Index, Barriers, Comparison of Out-of-school and In-school participants (Better score is underlined)

Variable	Cut-off	Out-of-school - (N=10) Pre-test mean	Out-of-school - (N=10) Post-test mean	Out-of-school - (N=10) Adjusted post-test	In-school - (N=29) Pre-test mean	In-school - (N=29) Post-test mean	In-school - (N=29) Adjusted post-test	Equality of Adjusted means
B1. Medical	3	4.00	4.20	4.09	3.10	3.65	3.69	.47
B2. Child Care & Family	22	25.20	26.70	26.35	23.72	27.20	27.33	.14
B3. New Situations & People	12	9.20	10.70	10.84	10.06	10.86	10.81	.00
B4. Ability to get & hold a job	7	6.50	6.40	6.57	7.06	6.96	6.91	.44
Total Barriers	44	44.90	48.00	47.75	43.97	48.69	48.78	.07

in-school participants. The interpretation of out-of-school data is hampered by the low predictability of some of the post-test scores, partly due to the small sample size (N = 10). Some of the slopes are quite close to zero or one. However, the trend in change of adjusted means is unambiguous; out-of-school did better on the Attractions, in-school did better on the Losses and the groups were even on the Barriers.

Looking in more detail, on the Attractions the in-school pre-tests were all better than the out-of-school pre-tests, while four of the five out-of-school post-tests were better than the corresponding in-school post-tests. The adjusted post-tests favor the out-of-school group on all five areas, although none of the differences are statistically significant. Nothing conclusive can be said about the slopes.

In the Losses, pre-tests are roughly the same, while adjusted post-tests favor the in-school group significantly in all three areas. The change in the out-of-school means is actually quite large but it moves away from the mid-point of the normative range. In the Barriers, there is very little difference between the groups in any area.

3.1.4 Ten-percent program: Using the ANCOVA procedure, we can evaluate the ten-percent program by comparing performance of the experimental and control groups. This data is presented in Tables 3-6 and 3-7. In the Attractions and the Losses areas, there are no significant differences and no clear trends of superiority for either group. In the Barriers, the experimental group showed greater improvement on all four areas. They began with lower scores in three

Table 3-6. Vocational Opinion Index, Attractions and Losses, Comparison of experimental and control groups. (Better score is underlined)

Variable	Mid-point of Normative range	Pre-test mean	Post-test mean	Adjusted post-test	Slope	Pivot	Pre-test mean	Post-test mean	Adjusted post-test	Slope	Pivot	Equality of slopes	Equality adjusted mean
		Experimental - (N=25)					Control Group - (N=12)						F-test
Attractions													
A1. Overall	26.0	32.08	30.92	31.52	.37	30.2	36.58	31.16	<u>29.92</u>	.50	25.8	.13	.36
A2. Benefits to children	5.5	8.16	7.44	<u>7.44</u>	.04	7.4	8.16	7.50	7.50	.31	7.2	.64	.01
A3. Benefits to workers	11.5	13.68	13.28	13.64	.49	13.3	16.50	13.50	<u>12.66</u>	.22	12.6	.80	.69
A4. Better life-style	9.0	10.72	10.32	10.52	.44	10.0	12.05	9.25	<u>8.83</u>	.15	8.7	.58	2.00
A5. Independence	7.5	8.96	8.60	<u>8.91</u>	.49	<u>8.2</u>	11.08	9.66	9.03	.37	8.8	.09	.02
Losses													
L1. Overall	27.5	30.04	27.68	<u>27.12</u>	.57	<u>24.5</u>	27.08	25.75	26.92	.65	23.3	.02	.01
L2. Personal Freedom	16.5	17.16	15.64	<u>15.45</u>	.41	<u>14.6</u>	15.50	14.66	15.07	.25	14.4	.24	.10
L3. Time for Family	11.5	12.88	12.04	11.76	.60	<u>10.8</u>	11.58	11.08	<u>11.66</u>	.85	8.1	.25	.01
Attractions and Losses													
A1. & A2. Pooled Overall	53.5	62.12	58.60	58.96	.62	52.8	63.67	56.92	<u>56.16</u>	1.07	-	.89	.80

Table 3-7 Vocational Opinion Index, Barriers, Comparison of experimental and control groups. (Better score is underlined)

Variable	Cut-off	Experimental Group - (N=25)			Control Group - (N=12)			F-test
		Pre-test mean	Post-test mean	Adjusted post-test	Pre-test mean	Post-test mean	Adjusted post-test	Equality of Adjusted means
B1. Medical	3	3.04	4.12	4.18	4.33	3.58	3.45	1.92
B2. Child Care & Family	22	23.28	29.08	29.44	26.08	24.08	23.33	7.41*
B3. New Situations & people	12	9.32	11.16	11.26	10.66	10.25	10.05	1.37
B4. Ability to get & hold a job	7	7.16	7.08	6.99	6.33	6.16	6.36	1.63
Total Barriers	44	42.80	51.44	52.07	47.42	44.08	42.78	7.99*

* - $P < .01$

of these areas and finished with higher scores in all four, compared to the control group. In one area, Child Care and Family, the difference is statistically significant ($p = .01$). Also, the difference between total Barriers is significantly different ($p = .01$) in favor of the experimental group.

3.2 Self-concept.

The significance of the difference between pre- and post-tests for the Self-Appraisal Survey was determined using the Wilcoxon matched-pairs signed-ranks test. This non-parametric statistic was used rather than the more common t-test because some of the sub-groups tested are defined by limiting the range of the pre-tests, as for example, the group with a low pre-test self-concept score. This creates a group with a non-normal distribution of scores, making a t-test inappropriate. Furthermore, there is some doubt that Likert-type scores may properly be considered interval data, a requirement for parametric tests. The Wilcoxon test, while not as powerful as the t-test, may be safely applied to these situations and is sufficiently powerful to identify significant changes in this study.

A comparison of pre- and post-tests appears in Table 3-8. Several interesting observations can be made in this data. There is a marginally significant improvement from the pre- to the post-test for the complete group ($p = .07$). In order to further pinpoint the occurance of this improvement, the performance of selected sub-groups was examined. The purpose was to attempt to look for common characteristics of individuals whose scores improved. For example, the scores of out-of-school participants improved significantly ($p = .08$), while those of the in-school participants did not ($p = .33$). Neither males nor females showed

Table 3-8. Comparison of Pre- and Post-tests: Self-Appraisal Survey. (Better score is underlined)

Group	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Significance of Difference P
Total	52	101.6	20.8	<u>105.3</u>	18.6	.07
In-school	38	102.6	21.6	<u>105.0</u>	17.8	.33
Out-of-school	14	98.9	18.8	<u>106.1</u>	21.3	.08
Males	24	104.4	21.5	<u>108.8</u>	17.0	.20
Females	28	99.2	20.3	<u>102.3</u>	19.6	.25
Pre-test above Median (101)	26	<u>118.0</u>	11.8	117.8	16.0	.61
Pre-test below Median (101)	26	85.2	13.4	<u>92.7</u>	10.8	.02
Ten-percent program Experimental group	30	97.8	20.9	<u>105.8</u>	18.6	.004
Control group	19	<u>105.9</u>	16.9	104.2	15.6	.59

any concentration of people with significantly improving scores. Most interesting is the group of people whose pre-test scores were below the median, indicating low self-concept at the beginning of the program. This group improved very significantly (p=.02), while those with pre-test scores above the median did not change at all.

The results of the ten-percent program are quite conclusive. The experimental group improved very significantly (p=.004), while the control group did not really change at all. At the aforementioned risk of using parametric statistics, we performed an analysis of covariance (ANCOVA) to directly compare post-tests of the experimental and control groups, while adjusting for differences in pre-test scores. The results are presented in Table 3-9. While neither pre- nor post-tests are significantly different between the two groups, the adjusted post-test means are significantly different. The F-test yields a .05 level of significance.

3.3 Other Evaluation.

Tallies of the two progress reports and the work-experience evaluations are presented as Tables 3-10, 3-11 and 3-12 respectively.

Placement data are summarized in the following table:

	Projected*	In-School	Out-of-School	Total
Total Positive Terminations	69%	75%	31%	54%
Entered Employment	11%	12%	21%	16%
Other Positive	58%	63%	10%	38%
Total Non-positive Terminations	31%	25%	69%	46%

(*Source: Agreement ....., p.4)

Table 3-9. Ten Percent Program: Analysis of Covariance for Self-Appraisal Survey

	Experimental Group	Control Group	Analysis of Covariance F	d.f.
Pre-test mean (covariate)	97.8	105.8	2.04	1,47
Post-test mean	105.8	104.2	.11	1,47
Adjusted post-test mean	108.0	100.8	4.23**	1,46

d.f. - degrees of freedom

** - $p < .05$

Table 3-10. Tally of Youth Employment Coordinators Progress Reports for YETP Participants March 31, 1978

	SATISFACTORY		UNSATISFACTORY		
ATTENDANCE:	1	2	3	4	5
Work	69%	18%	3%	5%	5%
Class	69%	16%	7%	4%	3%
Remedial Education					
TRAINING STATUS:					
Effort in Class	51%	29%	17%	3%	
Performance in Class	54%	28%	15%	3%	
Class Socialization	61%	20%	14%	5%	19%
Use of Course Content on Job	81%	12%	7%		
Relationship with Teacher	73%	20%	7%		
PERSONAL:					
Self Esteem	58%	30%	10%	2%	
Motivation	64%	23%	10%	39%	
Interest in Work	66%	21%	11%	19%	
Interest in Class	64%	19%	17%		
Show of Effort	62%	25%	11%	2%	

Table 3-12. Tally of Skills-Class Teachers Progress Reports, June 30, 1978

	MEAN	EXCEPTIONAL 1	2	SATISFACTORY 3	4	UNSATISFACTORY 5
EFFORT IN CLASS	2.52	21%	28%	31%	16%	3%
PERFORMANCE IN CLASS	2.61	18%	27%	35%	17%	3%
CLASS SOCIALIZATION	2.66	16%	26%	39%	14%	5%
USE OF COURSE CONTENT IN LAB	2.63	16%	30%	35%	15%	4%
RELATIONSHIP WITH TEACHER	2.32	23%	34%	32%	8%	2%
SELF ESTEEM	2.61	17%	27%	41%	9%	6%
MOTIVATION	2.65	21%	23%	32%	18%	6%
INTEREST IN LAB	2.58	21%	26%	32%	16%	5%
INTEREST IN CLASS	2.67	20%	25%	32%	17%	7%
TOTALS	2.58	19%	27%	34%	15%	5%

Table 3-11. Tally of Work Experience Evaluations from Supervisors, August 30, 1978

		YES	NO
I.	ATTENDANCE:		
1.	Does enrollee call in on days absent?	90.0%	10.0%
2.	Does enrollee explain absenteeism?	97.4%	2.6%
3.	Are excuses realistic?	94.8%	5.2%
4.	Is enrollee punctual?	87.1%	12.9%
5.	Is the enrollee frequently absent?	14.1%	85.9%
II.	JOB PERFORMANCE:		
1.	Does enrollee follow directions?	98.7%	1.3%
2.	Does he/she work well with others?	97.4%	2.6%
3.	Does he/she accept constructive criticism?	93.2%	6.8%
4.	Does he/she see things to be done?	75.0%	25.0%
5.	Does he/she observe department policies such as smoking, coffee breaks, safety rules, etc?	93.6%	6.4%
6.	Does enrollee do his/her share of the work?	96.0%	4.0%
7.	Can enrollee work by himself/herself?	87.8%	12.2%
8.	Does he/she keep work up to schedule?	89.7%	10.3%
9.	Does enrollee dress appropriately for the job he/she is doing?	98.7%	1.3%
10.	Does his/her work compare favorably to the work done by your regular employees?	89.8%	10.2%
III.	RELATIONSHIP WITH OTHERS:		
1.	Is enrollee accepted by his/her fellow workers?	97.4%	2.6%
2.	Does enrollee accept working with all his/her co-workers?	94.9%	5.1%
3.	Is he/she courteous?	96.2%	3.8%
4.	Is he/she trustworthy?	97.2%	2.8%
5.	Does enrollee accept supervision?	97.3%	2.7%
IV.	ATTITUDE:		
1.	Is enrollee able to adjust to various situations?	95.6%	4.4%
2.	Is he/she able to keep his/her composure under stress?	92.7%	7.3%
3.	Can he/she be objective and realistic about failures or mistakes?	94.2%	5.8%
4.	Does enrollee seek help when having difficulty?	93.2%	6.8%
V.	TRAINING:		
1.	Has the enrollee acquired the necessary skills to perform assigned tasks?	95.0%	5.0%
2.	Are there additional skills he/she needs to learn to perform job?	36.9%	63.1%

A tally of the three highest Basic Interest Areas for each participant on the Career Assessment Inventory is shown in Table 3-13.

The results of the six-month follow-up interview is presented in Appendix B.

Conclusions

4.1 Self-concept

The most definitive results appear in the area of self-concept. It is notable that those individuals who began the program with low self-concept tended to improve greatly while those who began with higher than average self-concept tended to not change. Self-concept is related to accurate perception of both strengths and weaknesses; overestimation of strengths or underestimation of weaknesses cannot be considered a positive development. Therefore, we should not expect people with adequate (that is, accurate) self-concept to show much increase in their scores. In fact, we found some of the highest scores on the pre-test showing much lower scores on the post-test. This may indicate a more accurate perception of self or a greater willingness to respond honestly to the survey.

If we define adequate self-concept in terms of the norms of the total group, then we can conclude that those individuals with deficient self-concept improved significantly after participating in YETP.

Another interesting finding on self-concept is that out-of-school participants performed better than in-school participants. There are several possible explanations for this, the most plausible being that out-of-school

Table 3-13. Tally of three highest basic interest areas for each participant as measured by the Career Interest Inventory.

Interest Area	Number of Participants
Mamual Skills	40
Mechanical Skills	37
Food Service	36
Clerical Work	31
Child Care	30
Office Practice	28
Electronics	26
Sales	25
Animal Service	16
Carpentry	15
Teaching	14
Medical Service	11
Agriculture	9
Nature/Outdoors	8
Writing	7
Religious Acitivities	6
Performance	5
Numbers	4
Science	3
Business	2
Arts & Crafts	1
Social Service	0

had many more training hours. It is significant that these extra hours consisted of work-experience. Benson & Whittington (1974) found that the number of training hours was unrelated to change in Job-Readiness Posture, but that trainees in on-site work-experience programs improved their JRP's while trainees in classroom programs did not. The same principle might apply to self-concept. We may have an opportunity to test the relative effects of training hours and types of training in the coming year.

4.2 Job-Readiness Posture.

In the area of Job-Readiness Posture we also see a trend toward improvement from the pre-tests to the post-tests. Although few of the individual areas of concern show statistically significant changes, the direction of the changes was mostly in a positive direction.

The greatest problem areas at the onset of the problem were Attractions to work and ability to deal with New Situations and People and both of these areas improved. Unfortunately, confidence in Ability to get and hold a job and loss of personal freedom took a slight negative turn, but these were not very serious problems to start with.

In view of the finding cited earlier from Benson and Whittington (1974) and our own results on the self-concept test, it is interesting to compare out-of-school with in-school performance on the VOI. In the Attractions, the out-of-school group did better on all five areas, although no individual change was significant. In the Losses, both group means were initially very close to the mid-point of the normative range, but the out-of-school scores moved far away from this mid-point while the in-school scores stayed roughly the same. As a result, the adjusted mean of the in-

school group was significantly better than the out-of-school group in all three areas. Finally, the Barriers changes are rather small and do not favor either group.

4.3 Ten-percent Program

The most surprising results occur in the ten-percent program, where the experimental group shows significantly greater gains in self-concept and in overcoming real or perceived Barriers to employment. In the Attractions and Losses areas, on the other hand, there is no difference between the groups.

We are surprised at the differences that did appear because we feel that the design of the experiment provided for very minimal differences in the experiences of the two groups. We are aware of only one possible uncontrolled influence which may lead to a different interpretation of the results. This is due to the method on assigning participants to one of the two groups based on thier skills classes. Although we tried to balance the general types of classes between the two group, we discovered later that members of the control group were strongly oriented towards "blue-collar" occupations (i.e., Auto Mechanics, Carpentry, Heavy Equipment Operation and Repair, Small Engine Repair and Welding) while the experimental group was strongly oriented towards "white-collar" occupations (i.e., Data Processing, Retailing, Office Practice and Art and Related Photography). In fact about two-thirds of the control group were enrolled in at least one "blue-collar" class, compared to about one-fourth of the experimental group. No members of the control group were in any "white-collar" classes (since they all included

non-disadvantaged participants), while "white-collar" classes were attended by 78% of the experimental group. Only the "service" occupations (i.e., Child Care, Cosmetology, Food Service and Health Occupations) were equally attended, by about three-fifths of each group.

It is possible on the basis of the data to accept the hypotheses that the presence of non-disadvantaged participants did enhance the experiences of the experimental group. However, it is equally plausible to conclude that YETP is more effective for people with "white-collar" interests than for people with "blue-collar" interests. Some explanations of this pheonomenon, based only on stereotypes of these two types of people, come to mind, including a greater acceptance of "class-room" situations by "white-collar" workers, or a greater ability to relate to the Youth Employment Coordinators. This calls for some efforts to modify the program to make it more effective for the future "blue-collar" worker, who faces less job-security than the "white-collar" worker, and who therefore has greater need of job-readiness skills.

4.4 Other evaluation

There is little that can be concluded from the three evaluation/progress reports other than to note the almost overwhelming satisfaction on the part of the evalvators with the participants' performance and progress. One exception is the need for additional skills which will hopefully be improved in fiscal year 1979 when a longer skills-training period is instituted.

Placement and terminations for in-school participants exceeded the planned objectives. The number of out-of-school participants enterring em-

ployment was nearly twice what was expected. However, the number of non-positive terminations among the out-of-school participants was also more than twice what was expected. The OET ("Annual Youth Report") attributes this to poor initial screening and referral. Some youths lacked reading ability necessary to keep up with classroom work and many others lack interest, remaining in the program only a few days. Efforts have been made at OET to improve the referral procedure.

* * * *

The information in this report, the observations of the YETP staff and the comments of YETP participants, supervisors and teachers have been incorporated into a modified program for fiscal year 1979. The overall positive experiences of all people concerned, and the positive impact on attitudes, knowledge and employment justify the continued refinement of the program.

Notes

1. The above statistics are primarily from Iden, et. al. (1976) and Lovell, et. al. (1977).

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Appendix A
Mission Statement

The purpose of this project is to provide the opportunity for each individual participant to develop the attitudes, skills, and knowledge that will make him/her a marketable employee.

The following represents the goals and their general objectives for the project:

UNDERSTAND AND APPRECIATE THE DISCIPLINE OF WORK

A. Understand that persistence, organization, use of resources, and productivity help one master the environment.

B. Understand that most of human activity involves work.

C. Experience the reality of the work world.

D. Gain access to role models in the work world.

E. Understand how those in the work world evaluate and perceive you.

DEVELOP A POSITIVE SELF CONCEPT

A. Develop perception of oneself in terms of interest, abilities, values, and goals.

B. Develop awareness of how others see you.

C. Develop concept of ideal self.

DEVELOP POSITIVE ATTITUDES TOWARD WORK

A. Internalize the concept that work is a valued institution.

B. Appreciate all kinds of work.

C. Learn how to deal with occupational stereotypes.

DEVELOP DECISION-MAKING SKILLS

A. Understand steps in decision-making process.

B. Understand psychological aspects of decision making.

C. Understand that individuals make many career-related decisions.

D. Learn to accept responsibility for one's decisions.

ACQUIRE EFFECTIVE INTERPERSONAL SKILLS

A. Learn how to work in various types of groups.

B. Learn how to get along with authority figures.

C. Learn how to get along with peers.

D. Learn effective skills for interacting with opposite sex and minority group members.

DEVELOP CAREER PLANNING SKILLS

A. Understand the importance of planned vs. haphazard career-related activities.

B. Assume responsibility for planning.

C. Develop sense of planfulness.

IMPLEMENT EDUCATIONAL AND JOB PLACEMENT GOALS

A. Understand use of placement services

B. Develop job seeking skills.

C. Encourage participants to further continue their training, experience, and education.

LOCATE AND USE SOURCES OF OCCUPATIONAL INFORMATION

A. Know the human and material resources that are available

B. Understand the role of occupational information when making career-related decisions.

TO GAIN EDUCATION TOWARD THE WORLD OF WORK

A. To explore a variety of occupational fields.

B. To practice some basic skills unique to the occupational fields of exploration.

Appendix B

Six-month Follow-up for YETP FY '78

The participants in YETP for fiscal year 1978 were contacted during the month of March, approximately six months after the end of the program. Information was gathered on the participants' current work status and on their perceptions of the program. Seventy-nine people were surveyed. In addition, six have moved from the area and several others could not be reached. The results are shown below, as percentages of the total number responding to each item.

Current Status: (includes 9% who are both employed and furthering education)

Employed	28
Furthering education	63
Military duty	3
Not employed	15

Employment:

Rating of employment conditions

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied
Chances for advancement	45	32	14	9
Salary	19	62	10	10
Working conditions	29	48	24	0

How did you find your present job?

Family or friend	23
Placement/Counseling Office	9
N.Y.S. Employment Service	5
Private employment agency	0
School instructor	5
Newspaper/Periodical	5
Radio/Television	0
Applied directly to employer	22
Other	32

Do you consider your job to be:

Permanent	33
Temporary	67

How does your job relate to the YETP program in which you were enrolled:

Directly related	19
Somewhat related	48
Unrelated	33

Did YETP prepare you for your job?

Strongly agree	33
Agree	57
Disagree	10
Strongly disagree	(

How many hours a week do you work?

Under 20	20
20-29	0
30-39	40
40 and up	40

Approximately how much do you earn a week?

Under $75.00	14
$75.00 - $99.00	19
$100.00 - $124.00	38
$125.00 - $149.00	14
Over $150.00	14

Education:

What type of school are you enrolled in:

High School	80
BOCES	12
College	8

Unemployed:

Reason for unemployment:

Family responsibilities	33
Illness/Disability	8
Temporary layoff	8
Seeking employment	58

Perceptions of YETP:

YETP was helpful in -	Strongly Agree	Agree	Disgree	Strongly Disgree
Preparing resumes/applications	57	38	5	0
Preparing for interviews	53	45	3	0
Personal career counseling	50	38	12	0
Getting leads for jobs	47	42	11	0

You enrolled to prepare for a specific job or career

Strongly	40
Agree	57
Disagree	1
Strongly disagree	1

Do you plan to enroll in an educational program for advanced training in your area?

Yes	29
No	52
Undecided	19